

### AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of the claims in this application.

#### Listing of the Claims:

1. (Currently amended) A moldable-foam molding ~~whose~~ with a density is in the range from 8 to 100 g/l, said molding obtainable via fusion of prefoamed foam beads ~~composed of comprising~~ expandable, pelletized thermoplastic polymer materials, said polymer materials comprising;

from 50 to 90% by weight of polystyrene B), selected from free-radical-polymerized glass-clear polystyrene (GPPS) or anionically polymerized polystyrene (APS), and

from 10 to 50% by weight of styrene copolymer A), selected from styrene-butadiene block copolymer, styrene- $\alpha$ -methylstyrene copolymer, acrylonitrile-butadiene-styrene (ABS), styrene-acrylonitrile (SAN), acrylonitrile-styrene-acrylate (ASA), methacrylate-butadiene-styrene (MBS), and or methyl methacrylate-acrylonitrile-butadiene-styrene (MABS) polymers.

2. (Currently amended) The moldable-foam molding according to claim 1, wherein at least 80% of the cells of the ~~individual~~ foam beads are of closed-cell type.

3. (Currently amended) An expandable, pelletized thermoplastic polymer material which comprises;

from 50 to 90% by weight of polystyrene B), selected from free-radical-polymerized glass-clear polystyrene (GPPS) or anionically polymerized polystyrene (APS), and

from 10 to 50% by weight of styrene copolymer A), selected from styrene-butadiene block copolymer, styrene- $\alpha$ -methylstyrene copolymer, acrylonitrile-butadiene-styrene (ABS), styrene-acrylonitrile (SAN), acrylonitrile-styrene-acrylate (ASA), methacrylate-butadiene-styrene (MBS), and or methyl methacrylate-acrylonitrile-butadiene-styrene (MABS) polymers.

4. (Currently amended) The expandable, pelletized thermoplastic polymer material according to claim 3, ~~which comprises~~ further comprising from 3 to 7% by weight of an organic blowing agent.

5. (Currently amended) A process for preparing expandable, pelletized thermoplastic polymer materials according to claim 3, ~~encompassing~~ comprising the steps of:

a) preparing a mixture from ~~from~~ 50 to 90% by weight of polystyrene B), selected from free-radical-polymerized glass-clear polystyrene (GPPS) or anionically polymerized polystyrene (APS), and from 10 to 50% by weight of styrene copolymer A), selected from styrene-butadiene block copolymer, styrene- $\alpha$ -methylstyrene copolymer, acrylonitrile-butadiene-styrene (ABS), styrene-acrylonitrile (SAN), acrylonitrile-styrene-acrylate (ASA), methacrylate-butadiene-styrene (MBS), ~~and or~~ or methyl methacrylate-acrylonitrile-butadiene-styrene (MABS) polymers; ;

b) heating the mixture using a static or dynamic mixer at a temperature of at least 150°C to form a polymer melt, and incorporate adding an organic blowing agent ~~into the polymer to the~~ melt; ;

c) cooling the polymer melt comprising blowing agents to a temperature of at least 120°C,

d) ~~discharge via~~ discharging the cooled melt through a die with holes whose diameter at ~~the discharge from the die~~ is at most 1.5 mm, and

e) pelletizing the melt comprising blowing agent ~~directly~~ downstream of the die plate under water at a pressure ~~in the range~~ from 1 to 20 bar.

6. (Currently amended) A process for producing moldable-foam moldings, according to claim 1, wherein hot air or steam is used in a first step to prefoam expandable, pelletized thermoplastic polymer materials according to claim 3 to give foam beads whose

density is in the range from 8 to 100 g/l, and, in a second step, ~~these are~~ the polymer materials are fused in a closed mold.

7. (New) A process for making foam molding comprising injecting hot air or steam into a polymer mixture comprising from 50 to 90% by weight of polystyrene B selected from free-radical-polymerized glass-clear polystyrene (GPPS) or anionically polymerized polystyrene (APS), and from 10 to 50% by weight of styrene copolymer A selected from styrene-butadiene block copolymer, styrene- $\alpha$ -methylstyrene copolymer, acrylonitrile-butadiene-styrene (ABS), styrene-acrylonitrile (SAN), acrylonitrile-styrene-acrylate (ASA), methacrylate-butadiene-styrene (MBS), or methyl methacrylate-acrylonitrile-butadiene-styrene (MABS) polymers to form beads with a density from 8 to 100 g/L, the process comprising:

heating the mixture using a static or dynamic mixer at a temperature of at least 150°C to form a polymer melt, and adding an organic blowing agent to the melt;

cooling the polymer melt comprising blowing agents to a temperature of at least 120°C;

discharging the cooled melt through a die with holes whose diameter is at most 1.5 mm;  
and

pelletizing the melt comprising blowing agent downstream of the die plate under water at a pressure from 1 to 20 bar.

8. (New) The process of claim 7, wherein the polymer mixture has a Mw from 190,000 to 400,000 g/mol.

9. (New) The polymer material of claim 3, wherein the polymer mixture has a Mw from 190,000 to 400,000 g/mol.

10. (New) The process of claim 7, wherein the polymer mixture has a polydispersity Mw/Mn of at most 3.5 or less.

11. (New) The process of claim 10, wherein the polydispersity is from 1.5 to 2.8.
12. (New) The polymer material of claim 3, with a polydispersity  $M_w/M_n$  of from 1.5 to 2.8.